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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/973,017 03/25/98 LEIJON

M 70557-2/8239

EXAMINER

MMC2/1229

JOHN P DELUCA
WATSON COLE GRINDLE WATSON
1400 K STREET NW
SUITE 1000
WASHINGTON DC 20005-2477

ENAD, E

ART UNIT

PAPER NUMBER

2834
DATE MAILED:

12/29/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/973,017

Applicant(s)
Leijon et al.

Examiner
Enad, Elvin

Group Art Unit
2834



☒ Responsive to communication(s) filed on Nov 13, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-4, 6-10, 12-35, 37, and 39-50 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-4, 6-10, 12-35, 37, and 39-50 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Continued Prosecution Application

1. The request filed on November 13, 2000, for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/973,017 is acceptable and a CPA has been established. An action on the CPA follows.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of claims 14-17,28, 29,31 and 49 must be shown. For instance, the stator winding having three phases with Y-connection (claim 14) , the Y-point winding insulated from the earth potential or connected to earth potential via a high-ohmic impedance and protected from over-voltages by means of surge-arresters (claim 15), the Y-point is earthed via a suppression filter...(claim 16), the suppression filter and surge arresters (claim 17), etc., must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

In addition, the drawings are objected to because they fail to show the elements as described in page 12, line 10 of the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Correction is required.

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Specification

3. The disclosure is objected to because of the following informalities: Applicant's specification refers to the claims for completeness. See page 7 lines 5 and page 11 line 22 for examples. The specification should not refer to the claims for supporting information

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 28, 29, 31 and 49 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 28 recites a quadrature-axis synchronous reactance, claim 29 recites an excitation system for enabling both positive and negative excitation, claim 31 recites the stator and rotor circuits and cooling means with a coolant either in liquid or gaseous form and claim 49 recites the winding comprising multiple uninterrupted turns. There is no support found in the specification for the claims recited.

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6. Claims 27,37,41,42 and 50 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 27, the meaning of the rotor being "pronounced" is unclear.

In regard to independent claim 35, the beginning of the sentence with "The" should be replaced with ---A--- for clarity and proper format. See also claim 37.

In regard to claims 41 and 42, these claims were dependents of claim 39, now under claim 29. If applicant desires to change their dependencies, then the proper format for amending the claims should be used.

In regard to claim 50, reference to "the core" is lacking proper antecedent basis.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-4,6-8,10,12,21,31,32,34,35 and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shildneck (USP 3,014,139) in view of Elton et al. (USP 5,036,165).

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Shildneck discloses the claimed invention except for having a cable winding comprising of at least one semiconducting layer around the conductor. Shildneck discloses a direct cooled cable winding for an electromagnetic device such as a large turbine-driven generator.

Elton et al. teach that it is known to have an electrical cable comprising an internal grading layer of semi-conducting pyrolyzed glass fiber layer in electrical contact with the cable conductor. In another form of embodiment, Elton et al. teach an electrical cable provided with an exterior layer of internal grading layer of semi-conducting pyrolyzed glass fiber layer in contact with an exterior cable insulator with a predetermined reference potential.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the cable winding as taught by Elton et al. to the dynamoelectric machine of Shildneck since such a modification according to Elton et al. would prohibit the development of corona discharge.

9. In regard to forming the semiconducting layer with the same coefficient of thermal expansion to that of the insulation layer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed these layers with similar coefficients since it was known in the art that having the expansion rate of the two layers the same is desirable in order to prevent cracking of the insulation and rapid wear between the two.

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10. Claims 9,13-20,30,33 and 39-49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shildneck (USP 3,014,139) in view of Elton et al. (USP 5,036,165) and further in view of Takaoka et al. (USP 5,094,703) and German Patent Specification No. 468,827.

Shildneck and Elton et al. disclose the claimed invention except for having cable windings which consists of a plurality of strands having electrical conductors which are insulated and uninsulated. In addition, Elton et al. do not disclose having a stator comprising slot(s) consisting of a number of cylindrical openings separated by narrow waist parts.

Takaoka et al., as seen in figures 7,8,10 and 11 teach having a stranded conductor for an electrical cable comprising a combination of uninsulated stranded conductor and an insulated stranded conductor.

German Patent Specification No. 468,827 teaches that it is known to have a stator having cylindrical opening winding slots with decreasing radius in order to accommodate the winding conductors having varying diameters.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the teaching of Takaoka et al. having insulated and uninsulated electrical conductor strands and to have modified the device of Shildneck and Elton et al. since such a modification according to Takaoka et al. would reduce the amount of insulation needed and the number of electrical connections required in the end windings. Moreover, it would have been obvious to have used the stator slot arrangement as taught by German Patent Specification No.

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468,827 since such an arrangement according to column 1, lines 25-29 would accommodate the conductors having varying diameters.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvin Enad whose telephone number is (703) 308-7619. The examiner can normally be reached on Monday-Friday from 8:00AM to 4:00PM.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez, can be reached on (703) 308-1371. The fax phone number for this Tech Center is (703) 305-3431(32).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.


Elvin Enad
Primary Examiner
Art Unit 2834
12.28.2000